

ECR5050hs/NUM

Technical Specifications

Technology	
travel mechanism	inertial piezo drive
positioner type	rotator
Size and Dimensions	
footprint; height	50x50; 15mm
max installation space	50x50; 15mm
weight (aluminium version)	102 g
weight (stainless steel version)	214 g
Materials	
positioner body	Aluminum
positioner body (/HV, /UHV)	stainless steel
actuator	PZT ceramics
connecting wires	copper, jacket: RT: silicon, HV/UHV: fiberglass
bearings	stainless steel
Options	
environmental options	/RT
Load (@ ambient conditions)	
maximum load	20 N
maximum dynamic torque around axis	5 Ncm
Coarse Positioning Mode	
input voltage range	0 - 45 V
travel range (step mode)	360 °
maximum drive velocity @ 300 K	15 °/s
typical minimum step size @ 300 K	0.2 m°

Fine Positioning Mode	
fine positioning resolution	μ°
fine angular positioning range @ 300 K	15 m°
input DC voltage range @ 300 K	0 - 120 V
Accuracy of Movement	
repeatability of step sizes	typically 5 % over full range
typ. forward / backward step asymmetry	10 %
wobble	6 mrad
typical bearing clearance	0.15 mrad
Position Encoder	
readout mechanism	optoelectronic sensor
encoded travel range	
sensor power (when measuring)	300 mW
wavelength of illumination	870 nm
sensor resolution	0.01 m°
repeatability	1 m° (bidirectional)
absolute accuracy	< 0.01% of travel range
Working Conditions	
mounting orientation	arbitrary
minimum pressure (/RT)	ambient
minimum pressure (/UHV)	1E-9 mbar
temperature range (/RT)	273K .. 328K
Connectors and Feedthroughs	
cable	50 cm cable with connector
connector type	14-pole connector
connector type (/HV, /UHV)	15-pin D-Sub connector
Versions	
/RT version	1012480

Technical Drawings

